

Average temperatures and departures from the normal.

Districts.	Number of stations.	Average temperature for the current month.	Departure for the current month.	Accumulated departures since January 1.	Average departures since January 1.
New England.	12	60.6	- 0.1	+13.4	+ 1.5
Middle Atlantic.	15	68.4	+ 2.1	+11.1	+ 1.2
South Atlantic.	10	75.0	+ 1.8	+ 4.3	+ 0.5
Florida Peninsula*.	8	79.6	+ 0.4	- 2.5	- 0.3
East Gulf.	11	77.9	+ 3.1	+ 2.1	+ 0.3
West Gulf.	10	79.6	+ 4.2	+ 8.6	+ 1.0
Ohio Valley and Tennessee.	13	71.0	+ 2.6	+ 1.9	+ 0.2
Lower Lakes.	10	62.4	- 0.6	+ 6.7	+ 0.7
Upper Lakes.	12	58.5	- 0.4	+18.8	+ 2.1
North Dakota*.	8	54.9	- 1.5	+23.1	+ 2.5
Upper Mississippi Valley.	14	65.1	+ 0.2	+10.1	+ 1.1
Missouri Valley.	12	65.8	+ 0.5	+15.3	+ 1.7
Northern slope.	9	56.7	- 0.8	+19.6	+ 2.2
Middle slope.	6	70.0	+ 2.4	+17.8	+ 2.0
Southern slope*.	8	77.5	+ 4.4	+15.3	+ 1.7
Southern Plateau*.	11	77.2	+ 2.9	+14.5	+ 1.6
Middle Plateau*.	10	62.5	+ 2.6	+12.8	+ 1.4
Northern Plateau*.	9	58.4	- 1.1	+ 8.4	+ 0.9
North Pacific.	7	56.2	- 0.7	- 2.9	- 0.3
Middle Pacific.	5	62.2	- 2.2	- 4.1	- 0.5
South Pacific.	4	68.9	+ 1.6	+ 9.6	+ 1.1

*Regular Weather Bureau and selected cooperative stations.

Average precipitation and departures from the normal.

Districts.	Number of stations.	Average.		Departure.	
		Current month.	Percent- age of normal.	Current month.	Accumu- lated since Jan. 1.
New England.	11	Inches.	78	- 0.7	- 4.0
Middle Atlantic.	15	2.47	78	- 0.7	- 4.0
South Atlantic.	11	2.52	62	- 1.8	- 5.3
Florida Peninsula*.	8	2.92	43	- 4.3	- 10.3
East Gulf.	11	3.27	56	- 1.7	- 0.2
West Gulf.	10	2.17	79	- 0.7	- 6.0
Ohio Valley and Tennessee.	13	2.66	114	+ 0.4	- 0.6
Lower Lakes.	10	3.25	104	+ 0.1	- 1.8
Upper Lakes.	12	2.87	94	- 0.2	- 4.9
North Dakota*.	8	3.10	119	+ 0.3	- 6.1
Upper Mississippi Valley.	15	1.85	97	- 0.1	- 6.8
Missouri Valley.	12	3.21	175	+ 1.8	- 2.6
Northern slope.	9	4.46	126	+ 0.3	- 2.5
Middle slope.	6	1.45	104	- 0.9	- 5.3
Southern slope*.	8	1.04	54	- 0.9	- 5.3
Southern Plateau*.	11	0.83	30	- 1.9	- 9.8
Middle Plateau*.	11	0.65	62	- 0.4	- 2.5
Northern Plateau*.	10	0.95	146	+ 0.3	- 3.7
North Pacific.	7	1.19	134	+ 0.3	- 2.4
Middle Pacific.	7	1.65	65	- 0.9	- 3.9
South Pacific.	4	0.13	25	- 0.4	- 6.2
		0.40	200	+ 0.2	- 4.7

*Regular Weather Bureau and selected cooperative stations

RIVERS AND FLOODS.

By Prof. H. C. FRANKENFIELD, in charge River and Flood Division.

Drought conditions continued during the month over that portion of the country extending from Virginia northeastward, seriously threatening the water supply of many cities, and it was not until after the beginning of the third decade of the month that the situation was relieved by substantial rains. Over the remainder of the country the usual seasonal low-water conditions prevailed, except in the lower Rio Grande, where floods occurred from September 15 to 24, inclusive. A tropical disturbance moved westward over the Gulf of Mexico from September 10 to 14, inclusive, reaching the mouth of the Rio Grande on the latter date. It was attended by excessive rains, and by the morning of September 16 the flood was well under way. Warnings were issued on this date, and the crest of the high

water reached Brownsville, Tex., on September 23. The flood was not as great by from 4 to 6 feet as that of September, 1909, and no serious damage was done. Some small crops were overflowed and railroad traffic was interrupted for a time, but the total losses were small. At Brownsville the levees prevented the flood waters from entering the town.

Hydrographs for typical points on several principal rivers are shown on Chart I. The stations selected for charting are Keokuk, St. Louis, Memphis, Vicksburg, and New Orleans, on the Mississippi; Cincinnati and Cairo, on the Ohio; Nashville, on the Cumberland; Johnsonville, on the Tennessee; Kansas City, on the Missouri; Little Rock, on the Arkansas; and Shreveport, on the Red.

SPECIAL PAPERS ON GENERAL METEOROLOGY.

JACOB W. BAUER.

By H. E. WILLIAMS, Assistant Chief of Bureau.

Mr. Jacob W. Bauer, whose death at Columbia, S. C., occurred on September 4, 1910, entered the service on July 23, 1883. He attained the rank of Sergeant in the Signal Corps of the Army and afterward the position of Section Director in the Weather Bureau. He served as assistant at Boston, Mount Washington, and New York City, and Official in Charge at Thatchers Island, Mount Washington, Duluth, and Columbia, S. C., which latter assignment he held from November 2, 1893, until the time of his death. He was a faithful and conscientious official and had a good record in the Bureau for the efficient performance of duty.

RECENT ADDITIONS TO THE WEATHER BUREAU LIBRARY.

C. FITZHUGH TALMAN, Librarian.

The following have been selected from among the titles of books recently received, as representing those most likely to be useful to Weather Bureau officials in their meteorological work and studies. Anonymous publications are indicated by a —.

Alfani, Guido.

L'osservatorio Ximeniano e il suo materiale scientifico. I. (Sezione meteorica). Pavia. 1910. 38p. 8°.

Bartholinus, Erasmus.

De figura nivis dissertatio. Hafniae. [1661]. [6], 42p. 24°.

Belgium. Observatoire royal (Service astronomique).

Liste des observatoires magnétiques et des observatoires séismologiques, par E. Merlin et O. Somville. Bruxelles. 1910. x, 192p. 8°.

Borchardt, H.

Zur Theorie der Himmelshelligkeit. Kiel. [1909]. 8°. (S.-A., Schriften Nat.-wiss. Ver. Schleswig-Holstein. Bd. 14, Hft. 2, p. 386-396.)

Brounov, P. [I.]

Über die Abhängigkeit einiger geographischen Elemente von dem barischen Relief der Erdoberfläche. n. p. n. d. 12p. 8°. (Reprinted from Neuvième cong. internat. de géographie, Genève, 1908. C.-r., T.2.)

Carthaus, Emil.

Die klimatischen Verhältnisse der geologischen Vorzeit vom Präcambrium an bis zur Jetzzeit, und ihr Einfluss auf die Entwicklung der Haupttypen des Tier- und Pflanzenreiches. Berlin. 1910. v, 256 p. 8°.

Coellen, Ludwig.

Die Gegensätze in den aussertropischen Klimaten der continentalen West- und Ostküsten auf der Nordhemisphäre. Wien. 1901. 52p. 4°. (S.-A., Abhdl. K. k. Geogr. Gesell., Wien, Bd. 3, 1901, No. 3.)

Conservation of natural resources. Meeting of engineers called jointly in ... New York City, March 24, 1909. [New York]. [1909]. 56p. 8°.

Crammer, Hans.

Eishöhlen- und Windröhren-Studien. Wien. 1899. 62p. 4°. (S.-A., Abhdl. K. k. Geogr. Gesell., Wien, Bd. 1, 1899. p. 19-76.)

Dörr.

Die Beobachtungsergebnisse der meteorologischen Stationen niederer Ordnung im Herzogtum Braunschweig für die Jahre 1908 und 1909. [Braunschweig]. [1910]. 18p. f°. (S.-A., Beitr. Stat. Hzgtn. Braunschweig. Hft. 24. 1910.)

Ebert, Hermann.

Über Luftelektrizität. [Berlin]. n. d. 8°. (S.-A., Denkschr., Erste Internat. Luftschifff. Ausstell., Frankfurt, 1909. Bd. 1. Wissensch. Vortr. p. 11-29.)